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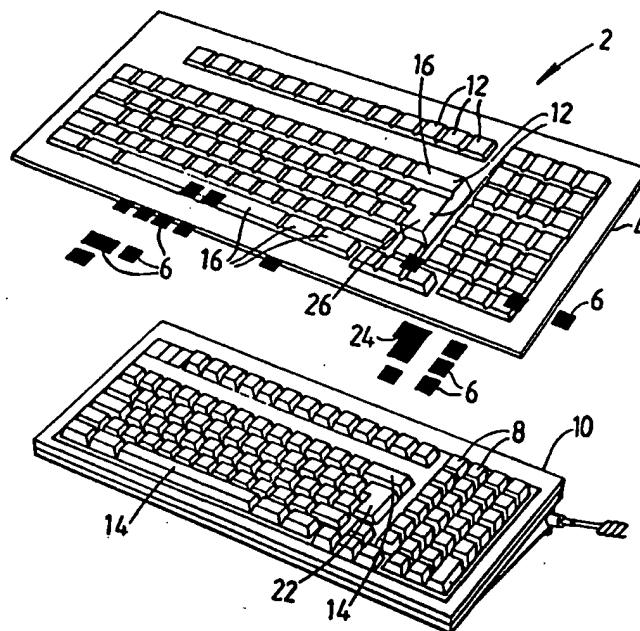
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| <b>(51) International Patent Classification <sup>5</sup> :</b><br><br><b>G06F 3/02</b>   | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 94/00809</b><br><b>(43) International Publication Date:</b> 6 January 1994 (06.01.94)  |
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**(54) Title:** A KEYBOARD COVER



**(57) Abstract**

A keyboard cover (2) which allows the keys (8) of a keyboard (4) to be used. The cover (4) includes portions (16) which correspond to the faces (14) of the keys (8). Inserts (6) are attachable to the portions (16) so as to cover markings on the faces (14) of the keys (8). The inserts (6) are adapted to include markings which are a substitute for the markings on the faces (14). Alternatively, the portions (16) themselves may include markings which cover and are a substitute for the markings on the faces (14) of the keys (8).

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## A KEYBOARD COVER

5           The present invention relates to a keyboard cover.

Computer software applications commonly assign keys of a computer keyboard to specific functions associated with the application. For example, a word processing package may designate one key to be the key to be depressed if a document is to be saved, or a flight simulator package may assign a number of keys to specific controls associated with an aircraft, such as rudder and throttle controls. It is difficult for a user to remember the particular assignments associated with each program or application, particularly when a number of different applications are used when performing a task.

15           Software packages are provided with quick reference charts which provide tables of the functions which have been designated to particular keys but to use the charts, the user must continually refer to the chart, in addition to referring to the keyboard and a display screen. This significantly increases the time taken to execute functions of an application, and for some applications, such as flight simulators, the delay incurred in striking a desired key may render it inordinately difficult to execute a particular step. Other packages provide templates which can be affixed adjacent or around the keys of a keyboard. However, such templates are normally permanent and tend to be only useful for matching tasks to a limited set of the keys on the keyboard, such as the function keys or the numeric pad keys.

25           The present invention provides a keyboard cover which allows the keys of a keyboard to be used, said cover comprising portions which correspond to the faces of said keys, and inserts attachable to said portions so as to cover markings on said faces, said inserts being adapted to include markings which are a substitute for the markings on said faces.

30           Preferably said portions permeate light.

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Preferably said inserts correspond to the shape of said faces. Preferably said portions correspond to the shape of said faces.

Preferably said inserts comprise stickers which preferably are self-adhesive.  
5 Alternatively, the inserts may comprise labels which may be attached with adhesive provided on said portions. The inserts may advantageously be detached and reaffixed to said portions.

The inserts may include predetermined markings, or markings can be added or  
10 erased by a user.

Preferably said inserts are attachable to said portions so as to be disposed between said faces and said portions.

15 Preferably the portions are either transparent or translucent. Preferably the cover is made of flexible material. Preferably the cover is transparent or translucent. The cover is preferably made of plastics material, such as PVC.

The present invention further provides a keyboard cover which allows the keys  
20 of a keyboard to be used, said cover comprising portions which correspond to the faces of said keys and include markings which cover and are a substitute for the markings on said faces.

A preferred embodiment of the present invention is hereinafter described, by way  
25 of example only, with reference to the accompanying drawings, wherein:

Figure 1 is an exploded view of a preferred embodiment of a keyboard cover for a keyboard; and

Figure 2 is a partial cross-sectional view of the keyboard cover placed over keys of the keyboard.

30

A keyboard cover 2, as shown in the Figures, includes a translucent or transparent cover sheet 4, and a plurality of inserts 6. The cover sheet 4 is moulded from plastics

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material, such as PVC, so as to fit over the keys 8 of a computer keyboard 10. In particular, the cover sheet 4 includes raised portions 12 which correspond to the shape of the keys 8, so as to fit over the keys 8. The raised portions 12 include face parts 16 which correspond to the faces 14 of the keys 8, and being transparent or translucent, allow a user to still view the markings which appear on the faces 14 of the keys 8. The cover sheet 4 is flexible so that the raised portions 12 can be depressed and the keys 8 still used in the normal manner with the cover sheet 4 on the keyboard 10.

The inserts 6 are self-adhesive stickers which are shaped so as to correspond to the faces of respective keys 8 and the faces 16 of the raised portions 12. The stickers 6 are attached, as shown in Figure 2, to the underside 18 of the faces 16 of the raised portions 12. The stickers 6 each cover the markings which appear on the face 14 of a respective key 8. The upper surface 20 of a sticker 6 which is attached to a raised portion 12 may include predetermined markings, such as printed markings or markings which have been included by a user. The markings act as a substitute for the covered markings of the respective key 8 and are used to assign a particular function to the key 8 which corresponds to the function designated by a particular software application or program. For example, if the application is a flight simulator which has designated the enter key 22 as being the increase throttle key, then the sticker 24 corresponding to the enter key 22 is marked to indicate this assigned function, e.g. "+ throttle", and is attached to the corresponding raised portion 26. The other inserts 6 may similarly be marked to represent particular functions associated with the flight simulator that are designated to particular keys, such as left and right rudder controls, flap controls, landing gear controls etc. Once the stickers 6 have been attached to the correct raised portions corresponding to the keys 8 to which functions have been assigned, the keyboard cover 2 is placed on the keyboard 10. A user is then able to control execution of the application simply by referring to the markings on the inserts 6 and depressing the keys over which they are disposed. Keys for which inserts are not included can still be viewed and used in the normal manner.

30

The keyboard cover 2 is particularly advantageous as it enables the user to have a direct relationship between the keys and a software application being used, without

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- having to refer to additional material, such as a template or a reference chart. As the cover 2 is also relatively inexpensive, a number of covers 2 can be configured for different applications and simply swapped when another application is used. The covers 2 can be configured by a user, if desired, by allowing a user to write on the stickers 6.
- 5 The stickers 6 can also be produced so as to be reusable and any markings placed thereon erased. The stickers 6 can, if desired, be replaced by labels which are attached to adhesive provided on the underside 18 of the raised portions 12.

- Alternatively, the covers 2 can simply be sold configured with the inserts 6
- 10 already attached for a particular application. The cover 2 can also be made so that the faces 16 of selected raised portions 12 incorporate the markings corresponding to key assignments for an application, which then cover and are a substitute for the normal markings which appear on the keys 8.

- 15 The keyboard cover 2 also provides the added advantage that it protects the keyboard 10 from contaminants such as dust and spilled liquids.

## CLAIMS:

1. A keyboard cover which allows the keys of a keyboard to be used, said cover comprising portions which correspond to the faces of said keys, and inserts attachable to  
5 said portions so as to cover markings on said faces, said inserts being adapted to include markings which are a substitute for the markings on said faces.
2. A keyboard cover as claimed in claim 1, wherein said portions permeate light.
- 10 3. A keyboard cover as claimed in claim 1, wherein said inserts correspond to the shape of said faces.
4. A keyboard cover as claimed in claim 3, wherein said portions correspond to the shape of said faces.
- 15 5. A keyboard cover as claimed in claim 1, wherein said inserts comprise stickers.
6. A keyboard cover as claimed in claim 5, wherein said stickers are self-adhesive.
- 20 7. A keyboard cover as claimed in claim 1, wherein said inserts comprise labels attached with adhesive provided on said portions.
8. A keyboard cover as claimed in any one of claims 5 to 7, wherein said inserts are detachable and refixable to said portions.
- 25 9. A keyboard cover as claimed in claim 1, wherein said markings of said inserts are respective and predetermined.
10. A keyboard cover as claimed in claim 1, wherein said markings of said inserts are  
30 added by a user.
11. A keyboard cover as claimed in claim 10, wherein said markings of said inserts



are erasable by said user so that substitute markings can be added.

12. A keyboard cover as claimed in claim 2, wherein said portions are translucent.
- 5 13. A keyboard cover as claimed in claim 2, wherein said portions are transparent.
14. A keyboard cover as claimed in claim 1, moulded to fit said keyboard.
15. A keyboard cover as claimed in claim 1, made of flexible material.
- 10 16. A keyboard cover as claimed in claim 15, made of plastics material.
17. A keyboard cover which allows the keys of a keyboard to be used, said cover comprising portions which correspond to the faces of said keys and include markings  
15 which cover and are a substitute for the markings on said faces.
18. A keyboard cover as claimed in claim 17, wherein said portions correspond to the shape of said faces.
- 20 19. A keyboard cover as claimed in claim 17, wherein said markings of said portions are predetermined.
20. A keyboard cover as claimed in claim 17, wherein said markings of said portions are added by a user.
- 25 21. A keyboard cover as claimed in claim 20, wherein said markings of said portions are erasable by said user so that substitute markings can be added.
22. A keyboard cover as claimed in claim 17, including further portions without  
30 markings and which correspond to the faces of respective keys and permeate light.
23. A keyboard cover as claimed in claim 22, wherein said further portions are

transparent.

24. A keyboard cover as claimed in claim 22, wherein said further portions are translucent.

5

25. A keyboard cover as claimed in claim 17, moulded to fit said keyboard.

26. A keyboard cover as claimed in claim 17, made of flexible material.

10 27. A keyboard cover as claimed in claim 26, made of plastics material.

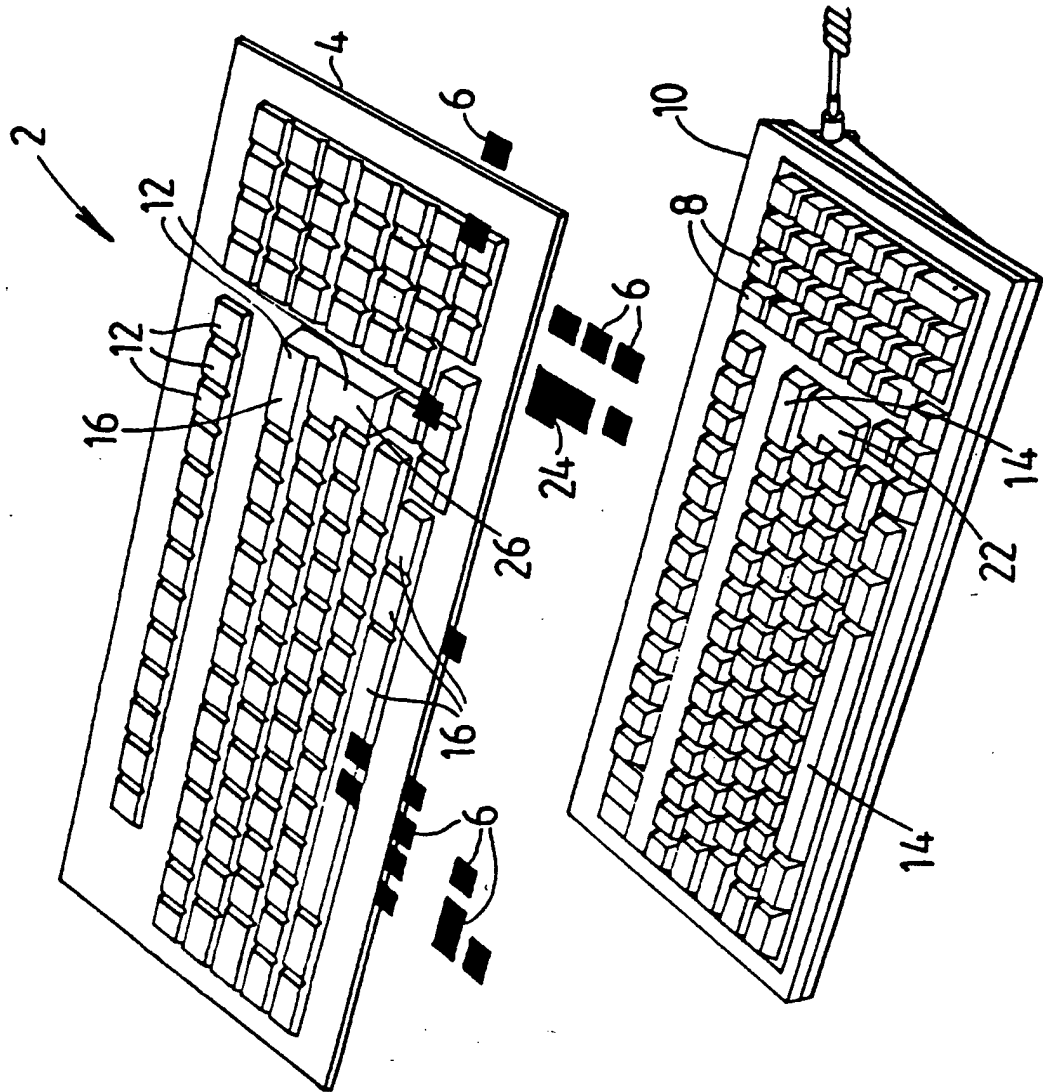


FIG 1

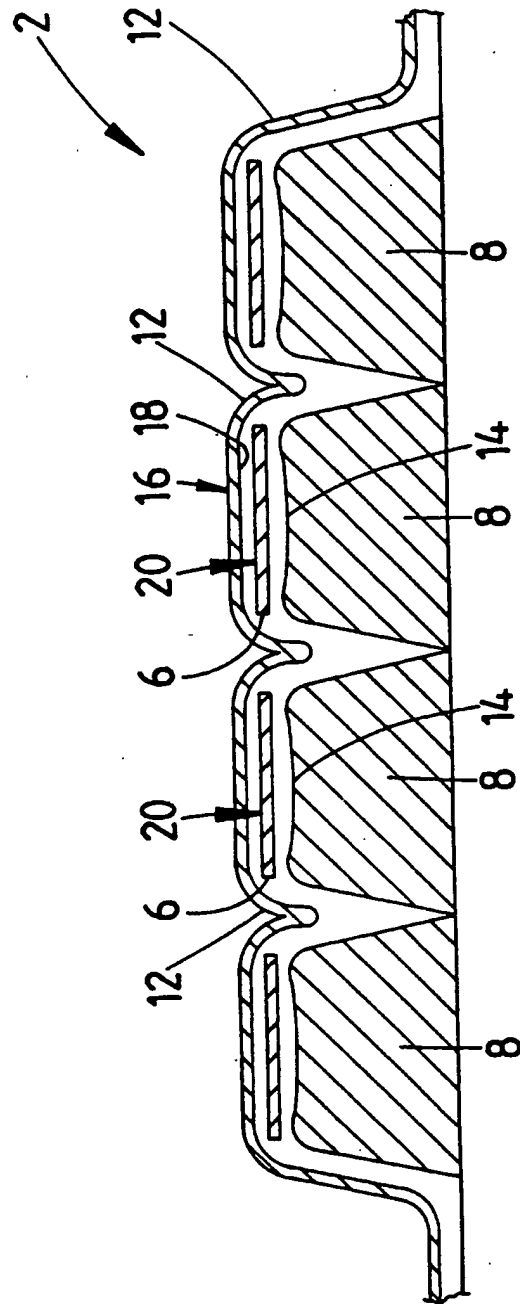



FIG 2

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU 93/00316

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|--|---|--|---|---|
| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>Int. Cl. <sup>5</sup> G06F 3/02<br><br>According to International Patent Classification (IPC) or to both national classification and IPC   |   |  |   |   |
| <b>B. FIELDS SEARCHED</b><br><br>Minimum documentation searched (classification system followed by classification symbols)<br>IPC <sup>5</sup> : G06F 3/02; G09B 13/00, 13/02, 13/04; B41J 5/08, 5/10<br><br>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched<br>AU : IPC as above<br><br>Electronic data base consulted during the international search (name of data base, and where practicable, search terms used)  |   |  |   |   |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>  |   |  |   |   |
| <b>Category *</b>  | <b>Citation of document, with indication, where appropriate, of the relevant passages</b>   | <b>Relevant to Claim No.</b>   |   |   |
| X  | Patent Abstracts of Japan, P1351, Page 147, JP,A, 4-31916 (SHIGEO NAKAGAWA) 4 February 1992 (04.02.92)  | (17-19,22-27)  |   |   |
| X  | GB,A, 2152437 (POLATSCHEK et al) 7 August 1985 (07.08.85)   | (17-19,22-27)  |   |   |
| X  | WO,A, 80/01725 (TELXON CORPORATION) 21 August 1980 (21.08.80)   | (17-19,22-27)  |   |   |
| Y  |   | (1-16)   |   |   |
| X  | US,A, 3871506 (VON LUDERS) 18 March 1975 (18.03.75)   | (1-27)   |   |   |
| X  | DE,A, 1955583 (OLYMPIA WERK AG) 13 May 1971 (13.05.71)  | (1-27)   |   |   |
| <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.         </div> <div> <input checked="" type="checkbox"/> See patent family annex.         </div> </div>  |   |  |   |   |
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| Name and mailing address of the ISA/AU<br><br>AUSTRALIAN INDUSTRIAL PROPERTY ORGANISATION<br>PO BOX 200<br>WODEN ACT 2606<br>AUSTRALIA<br><br>Facsimile No. 06 2853929   |   | Authorized officer<br><br><br>J.W. Thomson<br><br>Telephone No. (06) 2832214 |   |   |

| C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT |  |                       |
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| Category*  | Citation of document, with indication, where appropriate of the relevant passages                        | Relevant to Claim No. |
| Y  | US,A, 5089690 (OKAMURA) 18 February 1992 (18.02.92)  | (17-19,25-27)         |
| Y  | Derwent Abstract Accession No 88-093712/14, Class T04, FR,A, 2602608 (CAMPO) 12 February 1988 (12.02.88) | (1-27)                |
| Y  | Derwent Abstract Accession No 87-106439/15, Class P85, NL,A, 8502378 (DE COCQ) 16 March 1987 (16.03.87)  | (1-27)                |
| Y  | Derwent Abstract Accession No 83-730609/32, Class T01 T04, FR,A, 2519444 (HINDIE) 8 July 1983 (08.07.83) | (1-27)                |
| Y  | US,A, 4322587 (BURNS et al) 30 March 1982 (30.03.82)   | (1-27)                |
| Y  | Patent Abstracts of Japan, P73, Page 99, JP,A, 56-59341 (MITSUBISHI DENKI K.K.) 22 May 1981 (22.05.81)   | (1-27)                |
| Y  | Derwent Abstract Accession No L5162B/50, Class P75, DT,A, 2922006 (PLEHN) 6 December 1979 (06.12.79)     | (1-27)                |

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| Patent Document<br>Cited in Search<br>Report |         | Patent Family Member |                     |          |                     |          |                    |
|--|---------|----------------------|---------------------|----------|---------------------|----------|--------------------|
| GB   | 2152437 | DE                   | 3500652             | FR       | 2558110             | IL       | 70671              |
| WO   | 8001725 | AU<br>US             | 55495/80<br>4279021 | CA       | 1139890             | EP       | 24081              |
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